Panasonic®
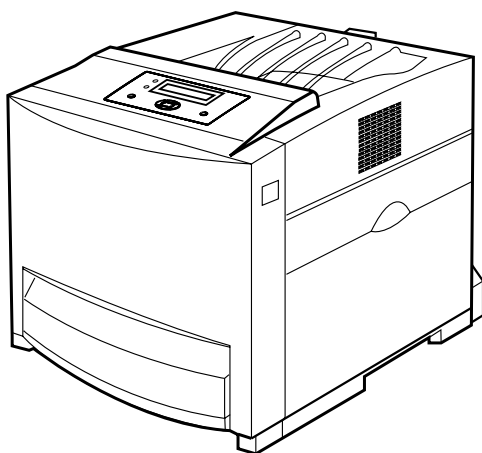
Setup Guide

Color Laser Printer

Model No. **KX-CL400**
KX-CL600

Thank you for purchasing the Panasonic Color Laser Printer.
The major difference between the two models is as follows:

- The print speed of KX-CL600 is faster than KX-CL400.
- An automatic duplex unit is provided with KX-CL600 as standard. (An option for KX-CL400)

Using Manuals:

This manual describes basic setup procedures for the Panasonic Color Laser Printer and necessary precautions for safety and use. First read this guide to setup the printer.

For other detailed information, refer to **Operating Instructions** included in the printer CD-ROM. To read **Operating Instructions**, Adobe Reader must be installed on the computer. If it is not installed, you need to install it on your computer by downloading it from Adobe's Web site or by other means.

Please carefully read this manual and keep this documentation in a safe place for future reference.

Features

Panasonic KX-CL400/KX-CL600 printer provides optimum performance for all your color and monochrome applications, plus quality, speed, versatility, ease of use and extensive network solutions, all in a compact design. Panasonic's one-pass technology is optimized to deliver fast color printing. Print quality up to a 1,200 x 1,200 dpi[*1] possible.

■ Fast Printing [*2]

- Up to 18 ppm (with KX-CL400)
  Up to 22 ppm (with KX-CL600)
  (in Color and Monochrome, Letter, Standard quality, Simplex print with standard media tray)

■ Automatic Duplex Printing

- KX-CL600: standard / KX-CL400: option

■ Equipped with Network, Parallel and USB interface

■ Max. paper capacity 1,690 sheets with two optional Paper Feeders (20 lb. paper)

■ High yield, easy-to-replace consumables

■ Economical and Environmental

- Saves energy while the printer is idle (ENERGY STAR® compliant).
- Toner Save mode

■ Versatile Print Feature

- Watermark, Overlay, Pages per Sheet, Zoom, etc.

■ Effective Utilities

- Device Monitor, Embedded Web Launcher, Network Setup Tool, etc.

■ Additional Features

If you install Upgrade Kit (option), the following features are available.

- PostScript printing in Windows®[*3] and Macintosh
- Direct Printing System (enables PDF file printing without opening such files)

[*1] Additional memory is recommended to insure printing in Enhance quality regardless of image size, paper size and duplex print.

[*2] Measured by Panasonic's method.

[*3] Microsoft® Windows® operating system (hereafter referred to as Windows)

As an ENERGY STAR® Partner, Panasonic has determined that this product meets the ENERGY STAR® guidelines for energy efficiency. (ENERGY STAR and the ENERGY STAR certification mark are registered US marks.)

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Screen shot(s) reprinted with permission from Microsoft Corporation.

Manuals in CD-ROM

The Operating Instructions in the printer CD-ROM consist of the following 7 files (manuals). When referring to sections (Installation, etc.) in the Operating Instructions, see the manuals in the printer CD-ROM.

To read the manuals, Adobe Reader must be installed on the computer. If it is not installed, you need to install it on your computer by downloading it from Adobe's Web site or by other means.

|	
Contents.pdf	Contents of **Operating Instructions** • Features • Schema for Color Printing
Setup.pdf	**Setup Guide** (This manual) • This manual describes basic setup procedures for this printer and necessary precaution for safety and use. First read this guide to setup the printer.
Install.pdf	**Installation** • This section contains information for the printer driver and utilities installation. When setting up the printer at first, read this section with the above Setup Guide.
Print.pdf	**Settings and Printing** • This section contains information for tray, printer panel, printer drivers and utilities. Information on printer equipped with Upgrade Kit is also included in this section.
Mainte.pdf	**Maintenance and Specifications** • This section contains information for replacing supplies, cleaning the printer, clearing jams, troubleshooting, repacking and specifications of this printer.
Network.pdf	**Network** • This section contains information for configuring printer on a network environment or using the network utilities.
PCM.pdf	**Print Count Manager** • This section contains information on a utility for tracking and managing the print volume of user groups (this utility can check how many color and grayscale pages are printed).

Table of Contents

For Your Safety

Notice

Installation and Relocation

[WARNING]

• To prevent fire or shock hazard, do not expose this product to rain or any type of moisture.

[CAUTION]

• The printer weighs approximately 32 kg (70 lbs.). It must be handled by two people. Turn the power off and remove the power cord when handling the printer.
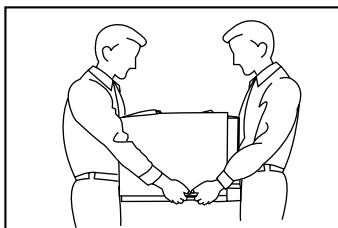
• Do not place the printer on an uneven or unstable surface.

• Avoid the media tray going across an edge of a desk. Dropping the printer may cause injury.

• Do not place the printer in an area where there is a lot of smoke, dust, chemical fumes or vibration.

• When moving the printer, be sure to unplug the power cord from the AC outlet. If the printer is moved with the power cord attached, it can cause damage to the cord which could result in fire or electric shock.

• Take care when handling the media tray or print cartridge because they are heavy. Dropping either may cause injury.

Laser Safety

CLASS 1 LASER PRODUCT

[CAUTION]

• This printer utilizes a laser. Use of controls or adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure.

Laser diode properties (4 provided)
Laser output: 5 mW max
Wavelength: 785 nm
Emission duration: Continuous

Power Source

[WARNING]

• The power source voltage of this printer is listed on the nameplate. Only plug the printer into an AC outlet with the proper voltage.

• When you operate this equipment, the AC outlet should be near the equipment and accessible.

• To ensure safe operation the power cord supplied must be inserted into a standard three-prong AC outlet which is effectively grounded (earthed) through the normal wiring.

• The fact that the equipment operates satisfactorily does not imply that the power point is grounded (earthed) and that the installation is completely safe. For your safety, if in any doubt about the effective grounding (earthing) of the power point, consult a qualified electrician.

• If the plug cannot be inserted into the AC outlet, contact a licensed electrician to replace the AC outlet with a properly grounded (earthed) one.

• Do not defeat the purpose of the grounding (earthing) plug (ex. do not use a conversion plug).

• Plug the power cord firmly into an AC outlet. Otherwise, it can cause fire or electric shock.

• Do not attempt to repair, pull, bend, chafe or otherwise damage the power cord. Do not place a heavy object on the cord. A damaged cord can cause fire or electric shocks.

• Ensure that the plug connection is free of dust. In a damp environment, a contaminated connector can draw a significant amount of current that can generate heat and eventually cause fire if left unattended over an extended period of time.

• Never touch a power cord with wet hands. Danger of electric shock exists.

• Stop operation immediately if your printer emits smoke, excessive heat, abnormal smell or unusual noise. These conditions can cause fire or electric shock. Immediately turn the printer off and unplug the power cord, and contact an authorized service representative.

• When disconnecting the printer, grasp the plug instead of the cord. Pulling on a cord forcibly can damage it and cause fire or electric shock.

[CAUTION]

• Do not leave the power cord plugged into the AC outlet if the printer will not be used for an extended period.

• Be sure to use the provided power cord. Otherwise, it may cause fire or electric shock.

For Your Safety

Operating Safeguards

[WARNING]

- If metal fragments or water gets into the printer, turn the printer off and unplug the printer immediately. Contact an authorized service representative. Operating the contaminated printer can cause fire or electric shock.

- Do not open covers and do not attempt to repair the printer yourself. Contact an authorized service representative.

- Do not alter the printer or modify any parts. Alteration or modification can cause fire or electric shock.

- Do not place any liquids near the printer. Accidental spillage of liquid into the printer may cause severe damage. If this occurs, turn the printer off, unplug the power cord and contact an authorized service representative.

- This product uses low frequency electromagnetic fields and can cause harmful interference to sensitive medical implant devices. If you have a cardiac pacemaker or implantable defibrillator, please consult your doctor for additional suggestion or advice.

- Do not use the printer near medical instruments, which can cause improper operation.

- Do not use the printer near automatic control machines (automatic doors, fire alarms, etc.). The electromagnetic fields can cause improper operation.

[CAUTION]

- Do not insert hands inside the printer when closing the door or cover. Pinching a hand or finger may cause injury.

- Do not touch hot or heated areas. Touching hot or heated areas may cause burns.

- If the printer is dropped or damaged, turn the printer off and unplug the power cord. Otherwise, it may cause fire or electric shock.

- Be sure to hold the media tray with both hands so that you do not drop it. The media tray weighs approximately 6.4 kg (14 lbs.) when it is fully loaded.

Ozone Release

[WARNING]

- Make sure that the printer is installed in a well ventilated room so as not to increase density of ozone in the air. Since ozone is heavier than air, it is recommended that air at floor level be ventilated.

Waste Disposal

[WARNING]

- Do not incinerate toner or toner containers. Toner dust may cause flashback when exposed to an open flame.

Caution on Toner Use

[CAUTION]

- Avoid ingestion, inhalation, eye or skin contact.
  - If ingestion occurs, drink several glasses of water to dilute stomach contents.
  - If inhalation occurs, remove to fresh air.
  - If skin contact occurs, wash thoroughly with soap and water.
  - If eye contact occurs, flush thoroughly with water.
  - In all cases, seek medical treatment if adverse symptoms occur.
- When the toner cartridge is at the end of its life, do not dispose in fire.
- Keep the toner cartridge out of children's reach. Store in a cool and dry place.

| Black Toner	INGREDIENTS: Carbon black (1333-86-4) Silica (68909-20-6) Charge control agent (31714-55-3) Polyester resin (2 kinds)
Cyan Toner Magenta Toner Yellow Toner	INGREDIENTS: Silica (68909-20-6) Charge control agent (72869-85-3) Polyester resin (2 kinds) Wax (1 kind)

For USA only
Distributed by Panasonic Digital Document Company,
Unit of Panasonic Corporation of North America
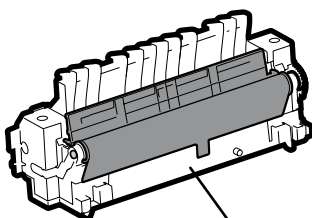Secaucus, NJ 07094

For Your Safety

CAUTION
HOT SURFACE
DO NOT TOUCH.
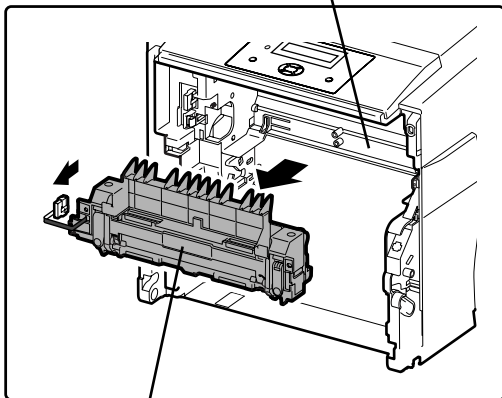
CAUTION
HOT SURFACE
DO NOT TOUCH.

CAUTION
HOT SURFACE
DO NOT TOUCH.

Precautions

FOR USERS IN THE UNITED STATES

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 and 18 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation.

This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications.

However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.
- The user may find the booklet "Something About Interference" available from FCC local regional offices helpful.

FCC Warning: To assure continued FCC emission limit compliance, the user must use the recommended shielded interfacing cable when connecting to a host computer. Also, any unauthorized changes or modifications to this equipment would void the user's authority to operate this device.

FCC Declaration of Conformity
Trade Name: Panasonic
Model Number: KX-CL400 or KX-CL600
Responsible Party:Panasonic Corporation of North America
    One Panasonic Way
    Secaucus, NJ 07094 U.S.A.
    Telephone No.: 1-800-726-2797
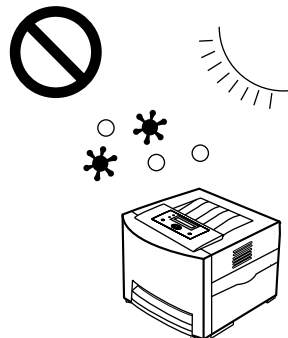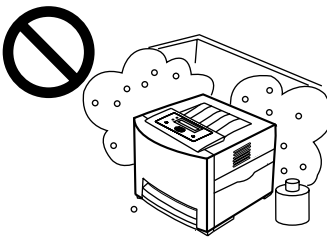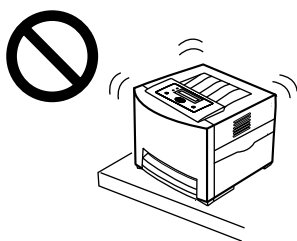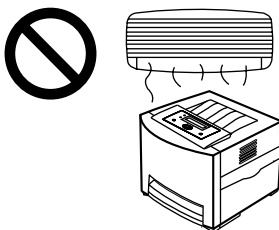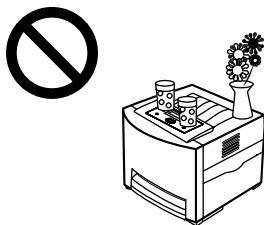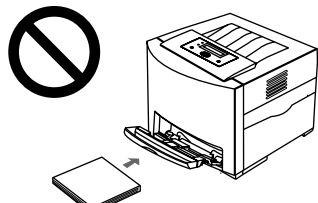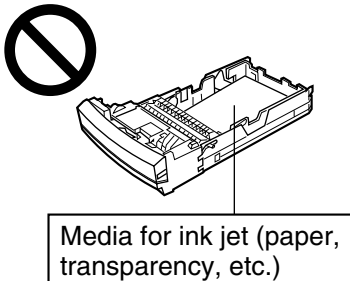This device complies with Part 15 and 18 of the FCC Rules.

Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.
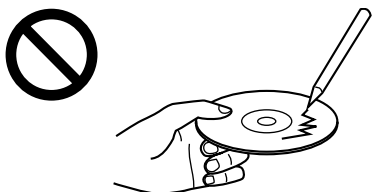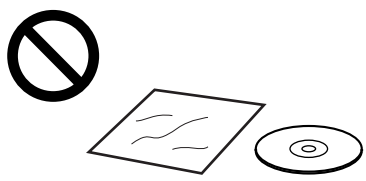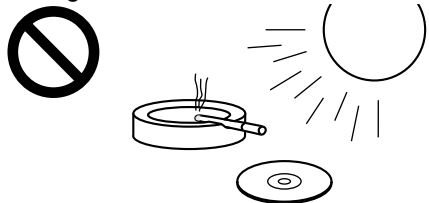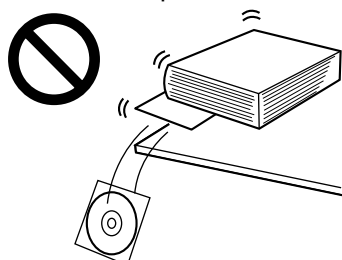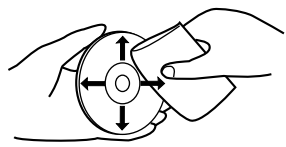
Before You Start

Precautions

■ General

To avoid printer malfunction, do not use the equipment under the following conditions:

- Direct exposure to sunlight.
- Extremely high or low temperature [temperature range: 10°C to 32.5°C (50°F to 90.5°F)]
- Extremely high or low humidity. (humidity range: 15% to 80% RH)
- Condensation due to rapid change of temperature.

- Areas of poor ventilation.
- Areas of high dust or chemical fume concentration. (solvent etc.)

- Unstable or uneven surfaces.

- Directly in front of air conditioning vents.

- Liquids near the equipment.

- A very large stack of media into the manual feed.

Media for ink jet (paper, transparency, etc.)

■ CD-ROM

To prevent the CD-ROM from accidental damage:

- Do not touch or write on the surface of the disc.

- Do not leave the disc out of its protective bag.

- Do not leave the disc in direct sunlight or near heat surfaces.

- Do not place heavy objects on the disc case or drop the case.

- To clean the disc, hold the disc by its edges and wipe it from the center to the edges with a dry, soft cloth.

Before You Start

■ Static Electricity Damage

To prevent static electricity damage to any of the following components, touch a grounded metal surface, such as the printer's bare metal frame prior to touching the component.

- Interface connectors: network, USB, parallel, and connector for optional paper feeder
- Connector pins on the optional paper feeder
- Electrical components, connectors inside the printer

■ Interface Cable

Always use a shielded interface cable. Use of an unshielded cable can result in radio interference with data.

■ Power Source

The voltage level of the power source must not vary more than ±10% from the voltage level marked on the nameplate (located on the rear of the printer).
Do not use an extension cord.
Do not use a line conditioner, transient suppressor or surge protector as it may cause a printer error.

■ Ventilation Space

The ventilation space is needed more than 20 mm (0.8") between the printer and a wall.

Accessories

Make sure that all accessories shown below were provided and have not been damaged. Report damage or shortages to the reseller from which the printer was purchased. The final page includes an area for recording important information such as the name of reseller, serial number, and date of purchase.
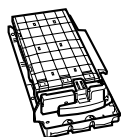
NOTE:
- Save the original carton and packing materials for future shipping and transportation of the printer. They have been specifically designed to protect the equipment during shipment.
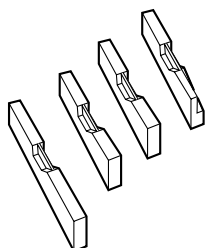
Toner cartridges
(Cyan, Magenta, Yellow, Black)
Printer includes free starter toner cartridges that yield 2,500 pages (based on 5% page coverage per color).

Color print cartridge

Black print cartridge
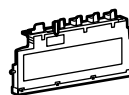
Waste toner cartridge

Power cord
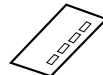
Color calibration card

Keep this Color calibration card for adjusting color density.
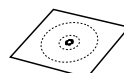
Printer CD-ROM

Setup Guide (this manual)
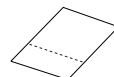
Warranty card

Supplies Re-order Label (see page 14)
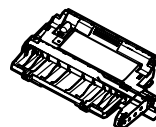
Automatic duplex unit
(KX-CL400: option /
 KX-CL600: standard)

Jam clear label (provided with KX-CL400 only)
Refer to page 14 in detail.
Save it carefully!

Before You Start

Part Names

■ **Front View**

Toner door

Output tray

Paper support

Printer panel

Front door

Front door release

Right side door

Media tray /
Multi-purpose tray

■ **Rear View**

Rear cover

Network interface connector

USB interface connector

Parallel interface connector

Optional paper feeder
cable cover

AC inlet

Rear tray cover

Power switch

9
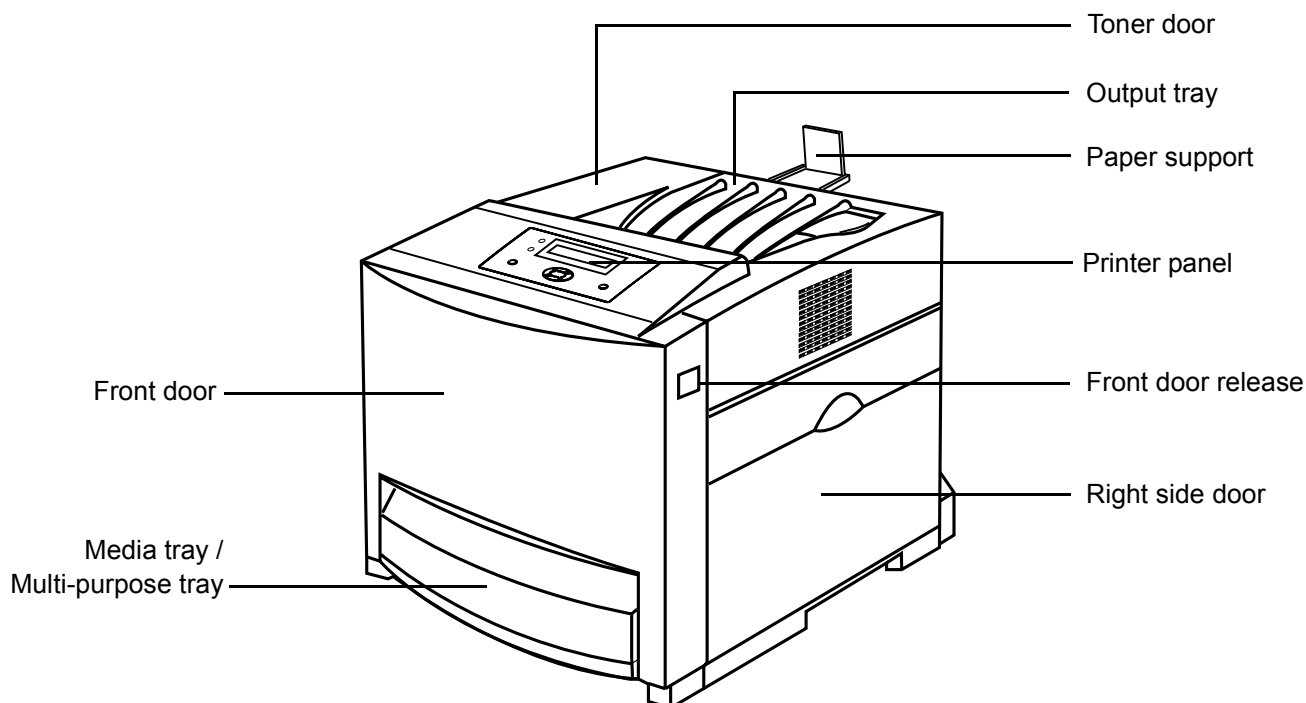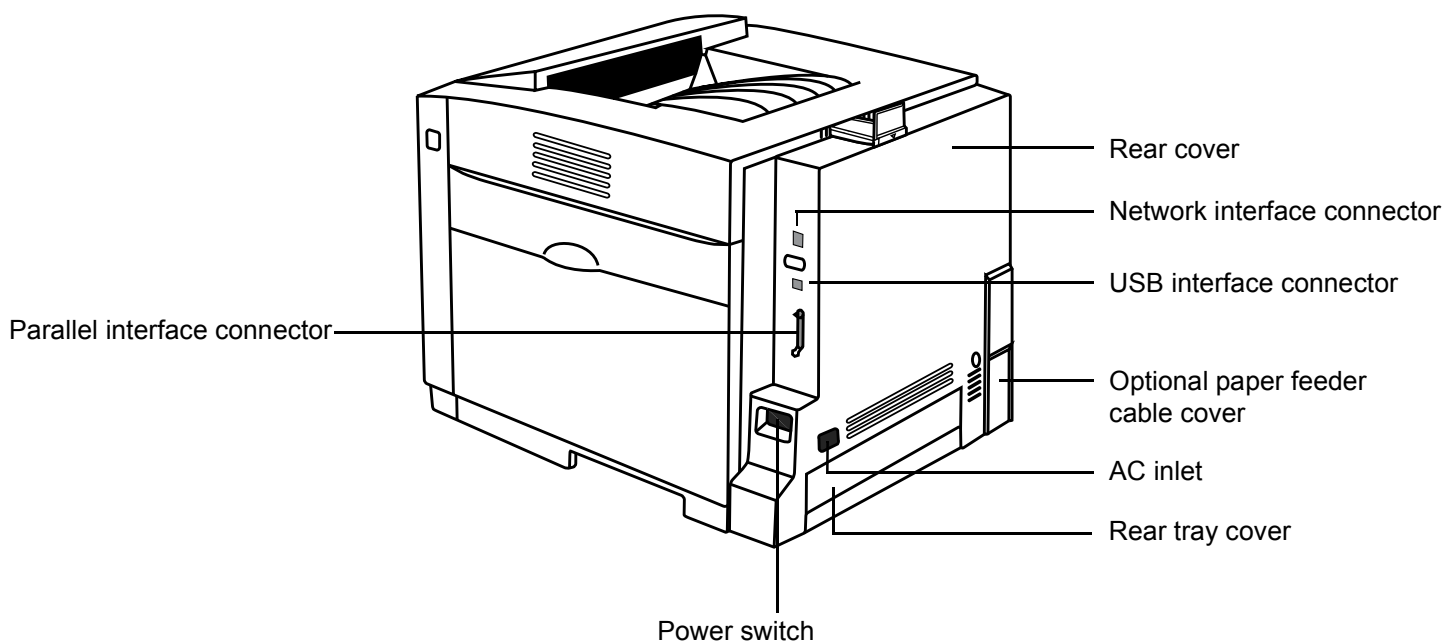
Before You Start

Printer Panel
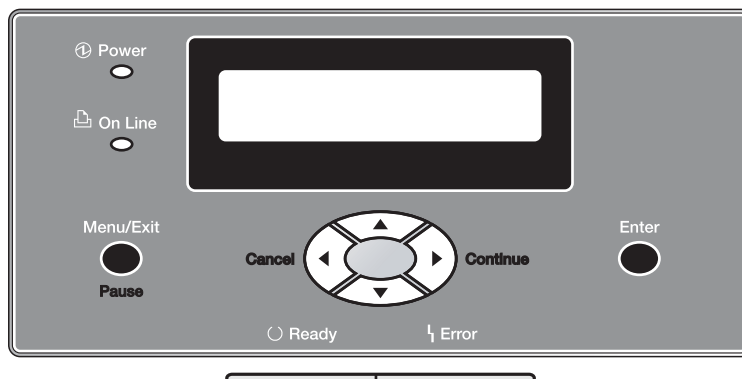
Button Operation

Button	Operation
Menu/Exit **Pause**	While **Ready** is displayed on the LCD, pressing this button will allow you to enter Menu mode.
	In Menu mode, pressing this button exits Menu mode and **Ready** is displayed on the LCD.
	When **Processing** or **Printing** is displayed in the upper line of the LCD, pressing this button will allow you to pause printing. While **Pause printing** is displayed on the LCD, pressing this button will allow you to resume printing.
▼	Pressing this button displays the previous item of the same level menu.
	Pressing this button decreases the numerical value one by one. Holding down this button will allow you to scroll faster.
▲	Pressing this button displays the next item of the same level menu.
	Pressing this button increases the numerical value one by one. Holding down this button will allow you to scroll faster.
▶ Continue	Pressing this button advances to the lower level menu. If a lower level menu does not exist, the action will be ignored.
	When performing the manual duplex printing function, after even pages are printed, odd pages are printed by pressing this button.
	When **LOAD Letter** or **Memory Overflow** , etc. appears on the LCD, you can print the current job anyhow by pressing this button. However, the print may not be proper.
◀ Cancel	Pressing this button advances to the upper level menu. If an upper level menu does not exist, the action will be ignored.
	While the printer prints, pressing this button will allow you to stop printing or cancel processing the current job.
Enter	Pressing this button advances to the lower level menu. The selection is activated by pressing this button if the lower level menu does not exist.
	When the life of an Accumulator Unit, Fuser Unit or Transfer Roller is worn out in the middle of printing, hold down this button more than 3 seconds after replacing the component. The remaining life is reset and the replacement error will be cleared.

Before You Start

Indicators

Four indicators show the following printer states.

Indicators	Printer Status
① Power ●	• Printer is turned on.
① Power ☼	• Printer is in Power Save mode.
① Power ○	• Printer is turned off.
🖶 On Line ●	• Printer is On Line and ready for printing.
🖶 On Line ○	• Printer is Off Line.
○ Ready ↳ Error	• Printer is in normal ready condition.
○ Ready ↳ Error	• Printer is receiving data or printing. • Data remains in the memory. • Printer is in Menu mode.
○ Ready ↳ Error	• User recoverable error (media jam, media empty, etc.) has occurred.
○ Ready ↳ Error	• A system error (Call for Service Error) has occurred. (Please contact the reseller from which the printer was purchased.)

● ▬▬▬ On

☼ ╱╲╱╲ Blink

○ ▭▭▭ Off
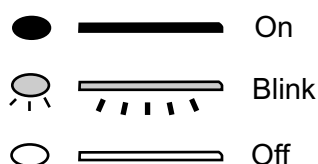
System Requirements

PC

■ CPU:

For Windows:
   Pentium II or greater
For Macintosh (with Upgrade Kit):
   PowerPC G3, PowerPC G4, PowerPC G5

■ Operating System:

For Windows:
   Windows® 98[1], Windows® 98 SE[2], Windows® Me[3], Windows NT® 4.0[4] (Service Pack 6), Windows® 2000[5] (Service Pack 4), Windows® XP[6] (Service Pack 1, Service Pack 2), Windows Server™ 2003[7]
For Macintosh (with Upgrade Kit):
   Requires Mac OS 8.6 through 9.2; built for Mac OS X.
   Requires Mac OS X v10.1, 10.2, 10.3.

■ RAM:

64 MB or more

■ Free disk space:

200 MB or more

■ Drive:

CD-ROM drive

[1] Microsoft® Windows® 98 operating system (hereafter referred to as Windows 98)
[2] Microsoft® Windows® 98 Second Edition operating system (hereafter referred to as Windows 98 SE)
[3] Microsoft® Windows® Millennium Edition operating system (hereafter referred to as Windows Me)
[4] Microsoft® Windows NT® operating system Version 4.0 (hereafter referred to as Windows NT 4.0)
[5] Microsoft® Windows® 2000 operating system (hereafter referred to as Windows 2000)
[6] Microsoft® Windows® XP operating system (hereafter referred to as Windows XP)
[7] Microsoft® Windows Server™ 2003 operating system (hereafter referred to as Windows Server 2003)

Minimum Space Requirements

120 mm (4.8")
For toner door

110 mm (4.4")
For power cord

130 mm (5.2")
For toner door

650 mm (25.6")
For media tray

350 mm (13.8")
For right side door
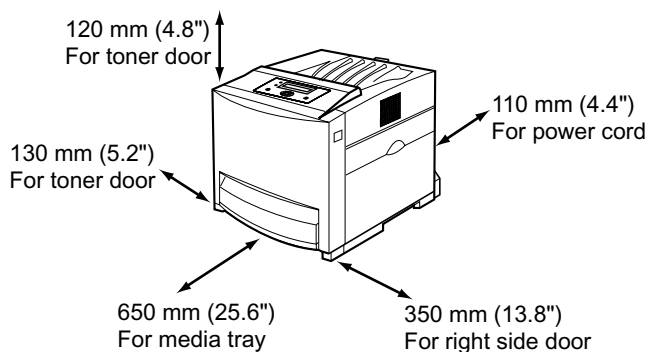
NOTE:
• When you install a consumable component or replace it with a new one, additional space may be required.

11

Setup

Setting up the Printer

Installing the Toner Cartridges

1 Open the toner door and remove the sealing tapes.
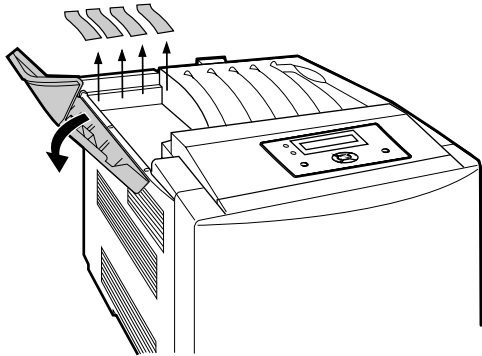
2 Open the plastic bags and take out the toner cartridges.

3 Shake the toner cartridges several times.
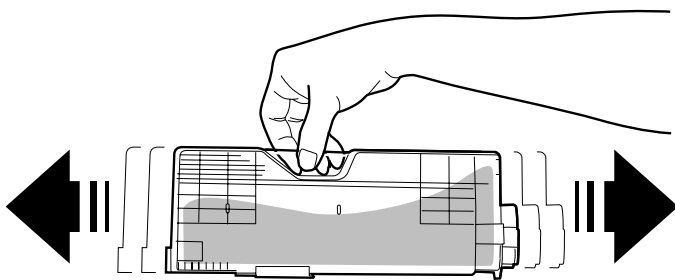
4 Insert the toner cartridges in the appropriately labeled slots. From right to left, the order of the color toner cartridges is Black (1), Cyan (2), Magenta (3), Yellow (4).

(4) (3) (2) (1)
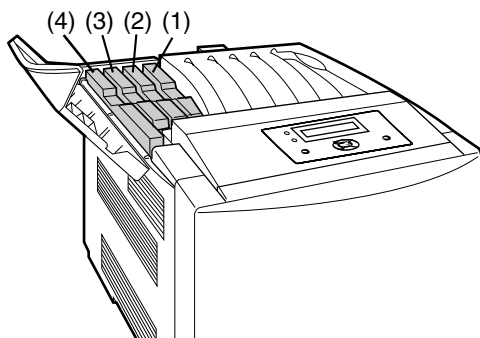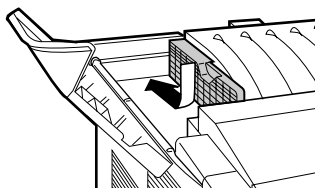
5 Close the toner door.

Installing the Print Cartridges

1 Open the right side door.
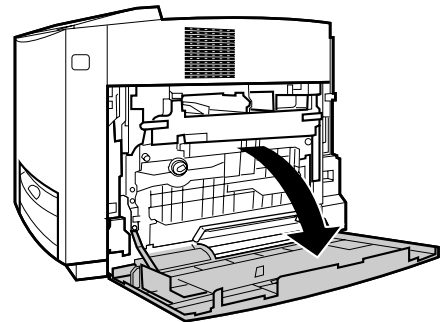
2 Unlock and open the print cartridge holder.
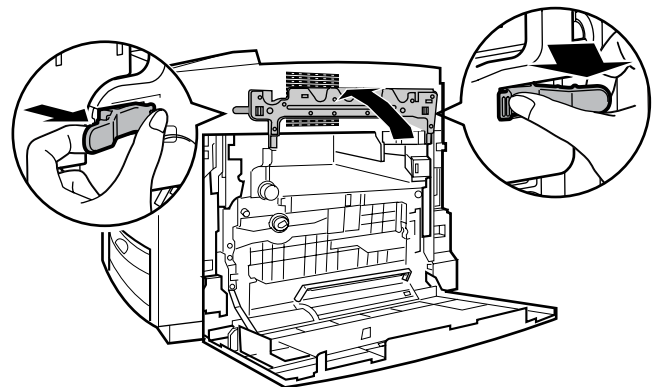
3 Open the plastic bags and take out the print cartridges.

4 Remove the protective caps and seal cover.

Color print cartridge

1
2
3
4

Protective caps

Seal cover

Black print cartridge

2
1

Protective cap

Seal cover
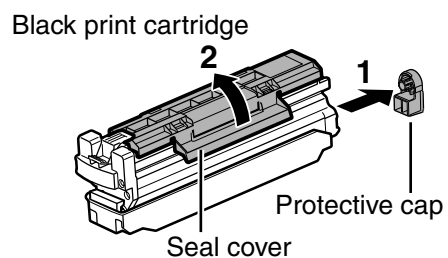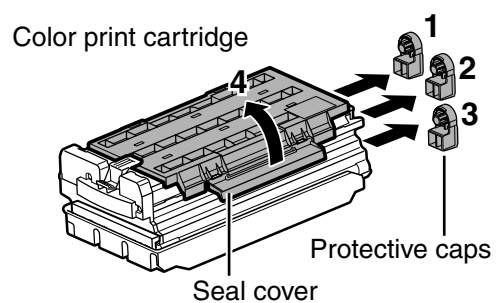
Setup

5 Holding the color print cartridge with the protective tray, match the arrow marks (▼) then insert the color print cartridge halfway into the printer.

(▼)

Protective tray
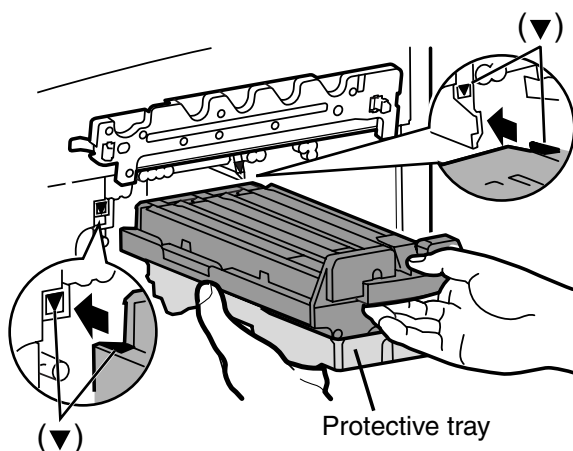
NOTES:

To prevent damage to the print cartridges,

- Do not touch the green drum surface.
- Do not expose to light for more than 45 seconds.
- Do not expose to direct sunlight.

Green drum
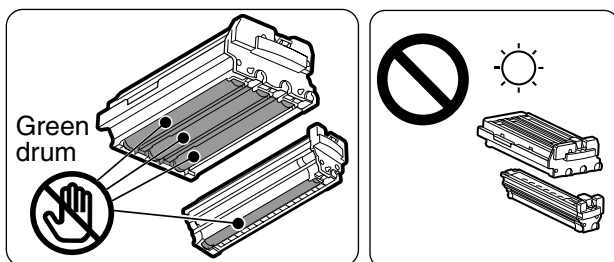
6 Firmly push the color print cartridge until it snaps into place.

- Save the protective trays, seal covers, protective caps, packing materials and cartons for future repacking.
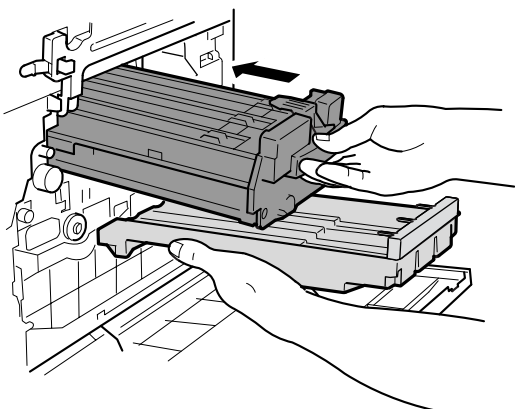
7 Repeat Step 3 - 6 for the Black print cartridge.

(◄)

(▼)

Protective tray
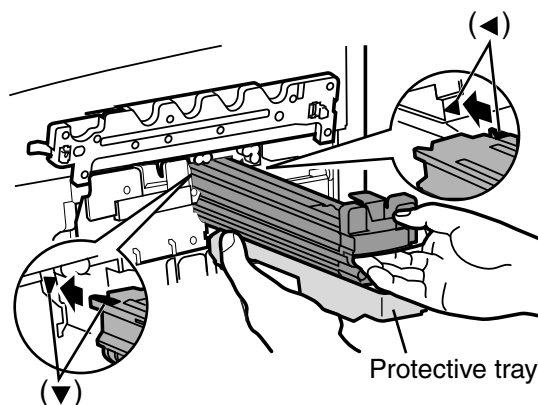
8 Install the waste toner cartridge (**1**) and slide the lock lever to the left (**2**).

LOCK   RELEASE
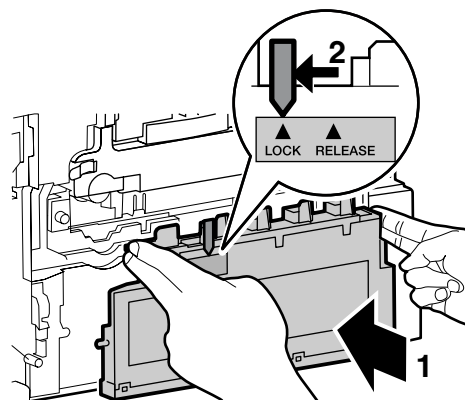
9 Close the print cartridge holder until it clicks (**1**) and lock it (**2**).
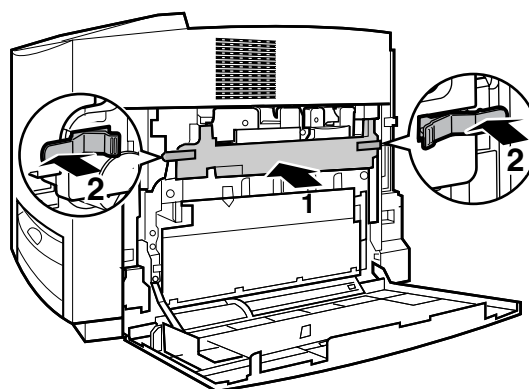
10 Close the right side door.

Setup

13

Setup

Installing the Automatic Duplex Unit

An automatic duplex unit is provided with KX-CL600 as standard. (An option for KX-CL400)

1 Push the front door release button (**1**) and open the front door (**2**).
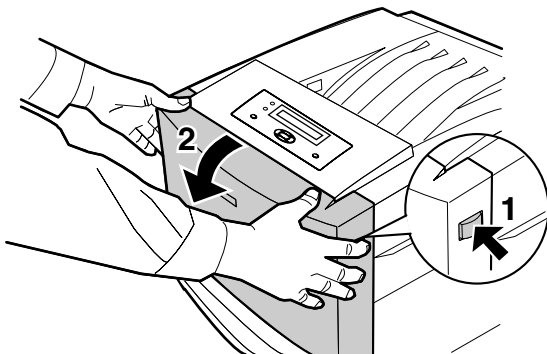
2 Insert the automatic duplex unit while confirming the position (A and B).
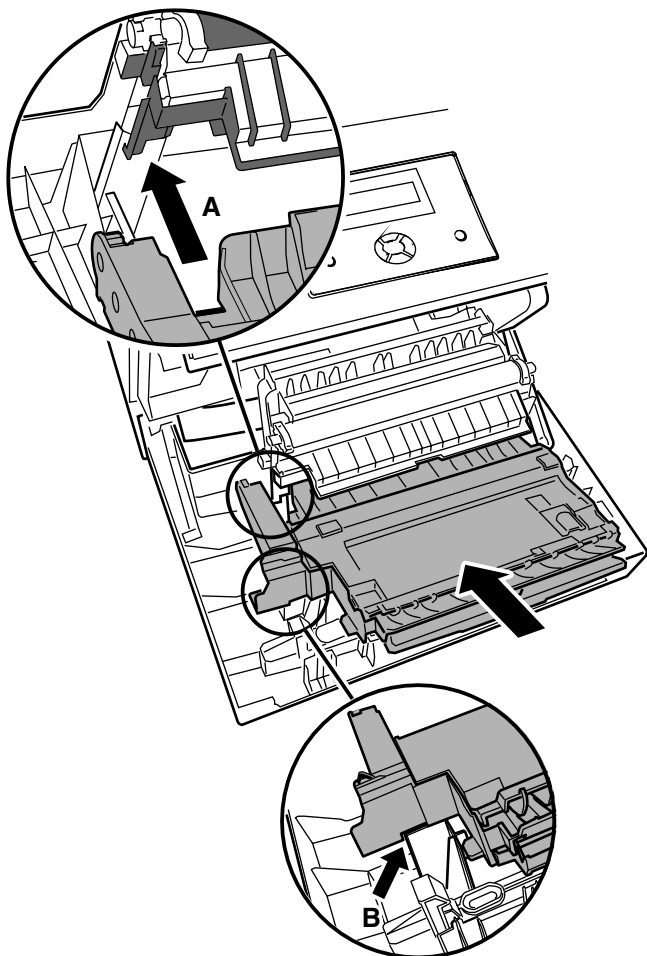
3 Push the automatic duplex unit down (1) (and paste the label (2) provided with KX-CL400 only so it is overlapped on the jam clear label that has been pasted).

Jam clear label for KX-CL400
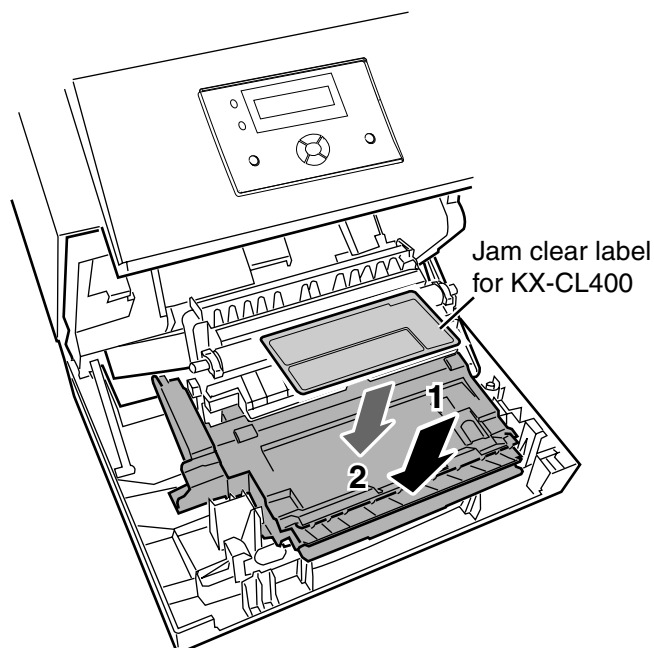
NOTES:
- The label is provided with KX-CL400 for referring to how to clear a media jam for when installing an automatic duplex unit (option) in future. Save it carefully for the time.
- If it is difficult to paste the Jam clear label, take the automatic duplex unit out of the printer and paste it.

4 Close the front door.

Pasting the Re-order Label

Paste the enclosed "Supplies Re-order Label" near the printer's LCD panel to assist you in interpreting the supplies related messages that may appear on the printer's LCD display.

Setup

Tray

When placing media in the tray, refer to the instructions below.
When using the multi-purpose tray, refer to page 16.

CAUTION:

* Be sure to hold the media tray with both hands so that you do not drop it. The media tray weighs approximately 6.4 kg (14 lbs.) when it is fully loaded.
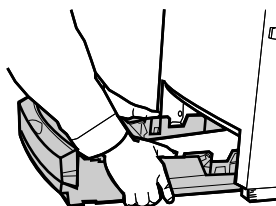
NOTE:

* When the tray cover is open or the multi-purpose tray is used, you cannot pull the media tray out of the printer or open the front door.
  Be sure to close the multi-purpose tray and the tray cover before pulling the media tray out of the printer or opening the front door.

Tray cover
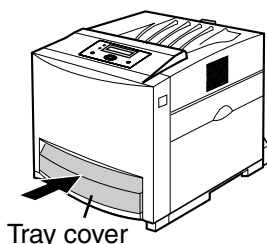
Using the Media Tray

Media Type	Media Weight	Media Size
Plain paper Bond/Letterhead Recycled paper	75 - 105 g/m^2 (20 - 28 lb.)	Letter, Legal, A4, B5 (JIS)
Thin paper	60 - 75 g/m^2 (16 - 20 lb.)	

1 Pull the media tray (**1**) out of the printer while slightly raising its front portion and remove the tray pad (**2**).
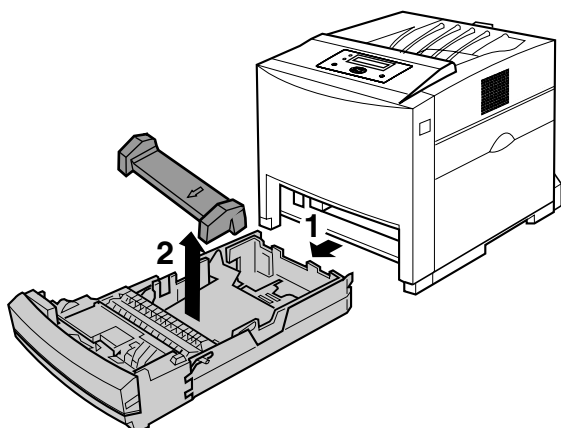
2 Pinch the media guides and slide them to the width of the media.
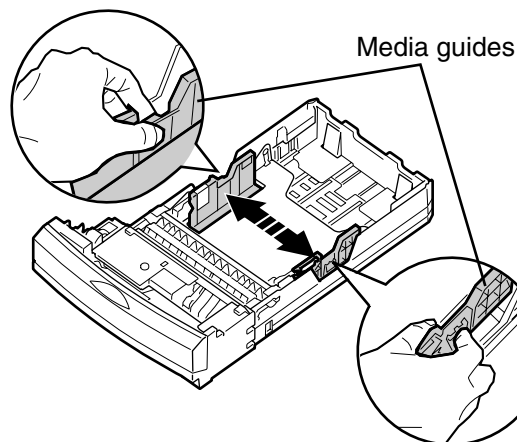
Media guides

3 Slide the length guide unit to adjust it to the media length. Slide the length guide unit (**2**) while pressing the **PUSH** mark (**1**) to extend it.

Length guide unit
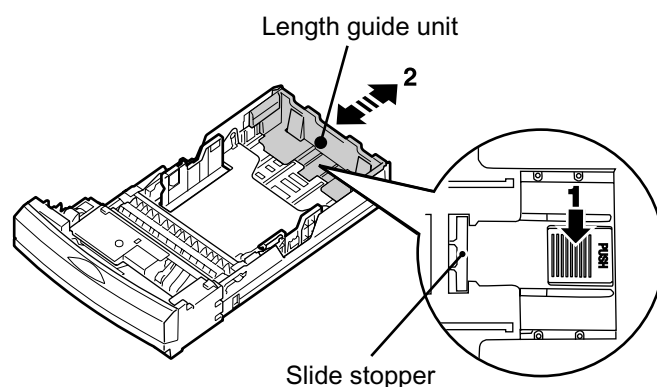
Slide stopper

NOTE:

* When adjusting the length guide unit to the media length, make sure the slide stopper of the length guide unit is fixed by the slit of the media tray.

4 Tap the media stack on an even surface to avoid media jams or skewed printing.
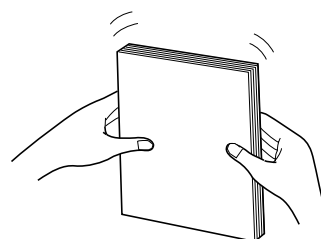
NOTES:

* Be careful not to leave fingerprints on the media, which can result in a smudged print.
* Reusing media (used paper or jammed paper) that has been fed through the printer once can reduce the life of the consumables and paper path components.

Setup

5 Place media with the **printing side up** under the hooks in the tray.

Hook

Upper limit

Load media with the **printing side up**.
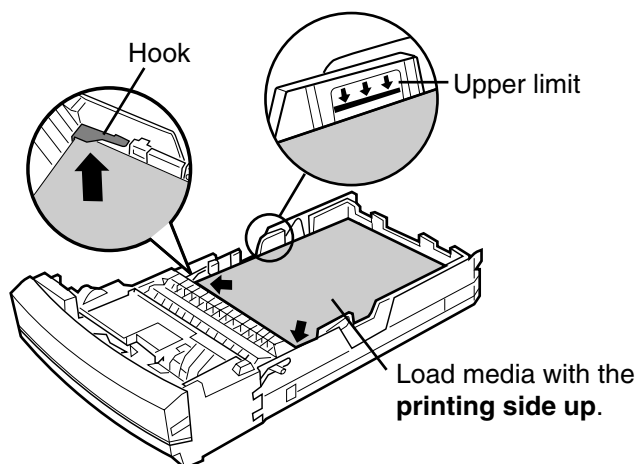
NOTES:

• When loading thick paper, card stock, coated paper, transparencies, labels, envelopes or Japanese postcards, use the multi-purpose tray. See "Available Media" in the **Maintenance and Specifications** section.

• Most media has instructions recommending the side to be printed first.

• Do not mix different types or thickness of media in the media tray at one time; this may cause a media jam.

• Loading media exceeding the upper limit may cause a media jam or miss feed.

6 Confirm the media guides are adjusted to the media size, then make sure to fix the length guide unit.

7 Slide the media tray completely into the printer.

CAUTION:

• Be sure to hold the media tray with both hands so that you do not drop it. The media tray weighs approximately 6.4 kg (14 lbs.) when it is fully loaded.

8 Pull (**1**) and raise (**2**) the paper support so that the media does not drop from the output tray.

Paper support
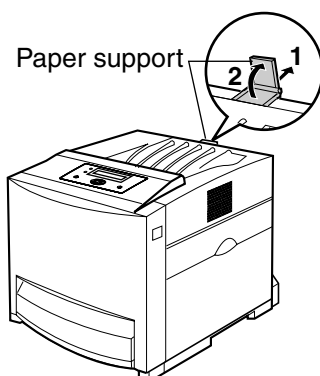
Using the Multi-Purpose Tray

The multi-purpose tray serves as an additional tray (for detailed information, refer to "Available Media" in the **Maintenance and Specifications** section).

1 Open the tray cover (**1**) and pull it to expand the multi-purpose tray (**2**).

1

2
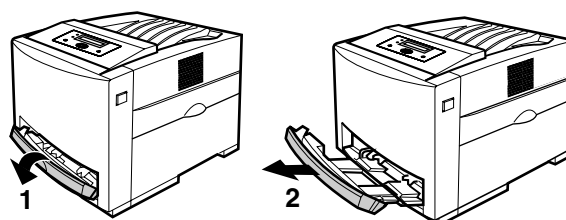
2 Separate the media guides to the approximate width of the media.
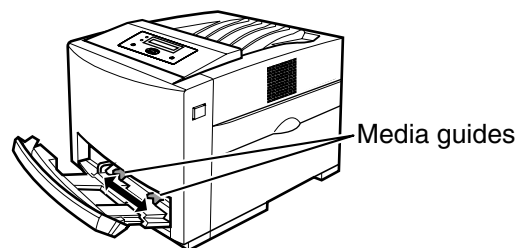
Media guides

3 Insert media with the **printing side down** into the multi-purpose tray while adjusting the media guides to the media width.

(For Plain Paper, etc.)

Upper limit

Load media with the **printing side down**.

(For Envelope)

Upper limit

Flap

Load media with the **printing side down**.

16
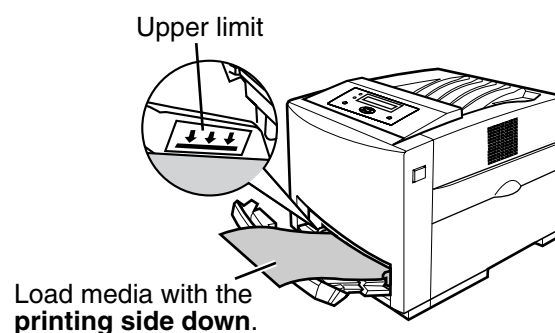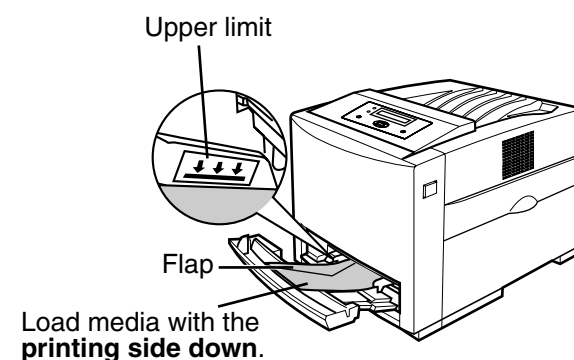
Settings and Printing

NOTES:
- Loading media exceeding the upper limit may cause a media jam or miss feed.
- When printing on envelopes, close the flap and insert with the flap side on the left side into the multi-purpose tray.
- Envelopes with openings on the shorter edge cannot be used.
- When printing on some types of envelope, a wrinkle may occur. For detailed information, refer to "Envelope Specifications" in the **Maintenance and Specifications** section.
- When printing on transparencies, refer to "Using the Multi-purpose Tray" of the **Basics** in the **Settings and Printing** section.

4 Pull the paper support (**1**) and raise (**2**) so that the media does not drop from the output tray.

Paper support
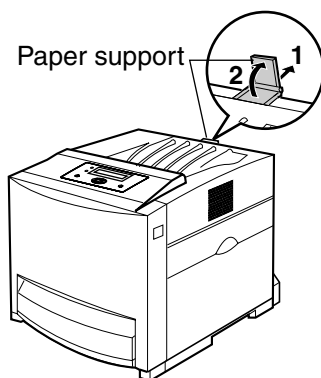
Power On

Connect the power cord to the printer. Turn the printer on. The Power indicator lights. After the printer is ready, the Ready indicator also lights and **Ready** is displayed on the printer LCD panel.
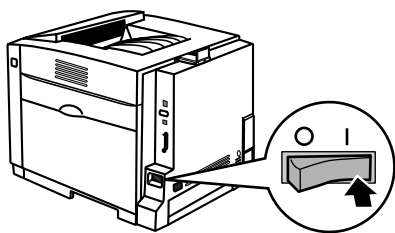
NOTES:
- If Self Calibration is performed, it will take some time to complete.
- When the printer enters Power Save mode, the Power indicator will start blinking and **Power Save** will be displayed on the printer LCD panel.
- When you turn on the printer for the first time, it will take about 5 minutes to fill the printer with toner. When the process is completed, **Ready** is displayed on the printer LCD panel.

Setting the LCD Language

- English* is the default language. (* denotes the default setting.)
- Select English, German, French, Spanish or Italian as the language that appears on the LCD panel.

1 Press **Menu/Exit (Pause)** button to enter Menu mode.

2 Press ▲ button until the **System** menu appears.

3 Press ▶ button.
The **Language** menu appears.

4 Press ▶ button.
The **English*** menu appears.

5 Press ▲ button until the desired language is displayed.

6 Press **Enter** button to activate your selection.

Printing the Configuration Page

It is possible to confirm the printer's settings by printing the Configuration Page as below.

If the printer is connected to the network, consult with the network administrator for the printer's network setting before printing the Configuration Page. For detailed information, refer to "Setting up TCP/IP on the Printer" in the **Installation** section.

1 Press **Menu/Exit (Pause)** button to enter Menu mode.
The **System Information** menu appears.

NOTE:
- If the hard disk drive is installed in the printer, press ▲ button to display the **System Information** menu.

2 Press ▶ button.
The **Menu Map** menu appears.

3 Press ▲ until the **Configuration Page** menu appears.

4 Press **Enter** button.
The printer will start printing the **Configuration Page**.

Settings and Printing

Connecting the Printer to a Computer

Three types printer to computer connections exist.
NOTE:
- If you do not have a network, parallel or USB interface cable, you may need to purchase one.

[A] When using the network interface cable:
NOTES:
- Use category 5 shielded twisted pair cable with RJ-45 connectors.
- Do not connect connectors other than 100Base-TX / 10Base-T. Excessive current flow may cause damage of the printer.

1 Connect the interface cable from the printer to a network device.

2 Print the Configuration Page to confirm the IP Address of the printer.

[B] When using the parallel interface cable:
NOTES:
- Use a shielded cable 2.0 m (6.6 ft.) or less in length.

1 Turn off the printer.
- Be sure to turn off the printer to avoid the Plug and Play installation.

2 Connect the interface cable from the printer to a computer.

[C] When using the USB interface cable:
NOTES:
- Use a shielded cable 5.0 m (16.4 ft.) or less in length.
- For Windows 98, only Windows 98 SE is available when using a USB interface.
- Windows NT 4.0 does not support USB interface.

1 Turn off the printer.

2 Connect the interface cable to a computer.
- Be sure to turn off the printer and not to connect the interface cable to the printer to avoid the Plug and Play installation.

[A] Network interface
[C] USB interface
Computer
[B] Parallel interface
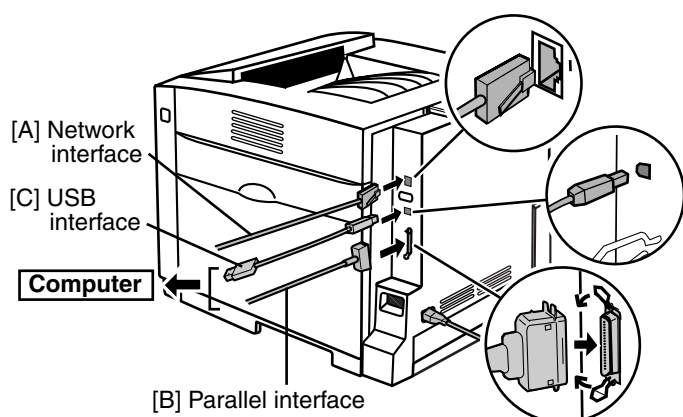
Installing Driver and Utilities

KX-CL400 or KX-CL600 is the model of the PCL printer. If you install an Upgrade Kit (for PostScript 3) in the printer, the model name displayed on the printer driver and utility window becomes KX-CL410 or KX-CL610 respectively.

KX-CL410: KX-CL400 with Upgrade Kit
KX-CL610: KX-CL600 with Upgrade Kit

The following steps are for when installing the printer driver for the KX-CL400 or KX-CL410. For other models, replace the model name with the actual one.

Contents of the Printer Software

The following is the list of drivers and utilities included in the printer CD-ROM provided with the model of the PCL printer or Upgrade Kit. To install the driver, refer to the following steps.

To install utilities, refer to the **Installation** section.

■ For Windows

Printer Drivers and Utilities	KX-CL400 KX-CL600	Upgrade Kit
PCL 6 Printer Driver	✓	✓
PostScript 3 Printer Driver	–	✓
Device Monitor	✓	✓
Embedded Web Launcher	✓	✓
Direct Printing System	–	✓
HDD Utility (with Hard Disk Drive)	✓	✓
Print Media Test Pattern	✓	✓
Network Setup Tool	✓	✓
Web Administrative Tool	✓	✓
Remote Maintenance Setting Tool	✓	✓
Print Count Manager	✓	✓

✓: included   –: not included

■ For Macintosh (with Upgrade Kit)

Printer Drivers and Utilities	KX-CL400 KX-CL600	Upgrade Kit
PostScript 3 Printer Driver	–	✓
Status Display	–	✓
Network Setup Tool	–	✓

✓: included   –: not included

Settings and Printing

Installing Printer Driver

NOTES:
- If using the **Network** interface cable, be sure to connect the printer with a network interface cable and to turn it on.
- If using the **Parallel** or **USB** interface cable, be sure to turn off the printer or not to connect the printer with an interface cable to avoid the Plug and Play installation.

■ For Windows

There are the following two methods to install the printer driver for Windows.
- **Automated Driver Installation**
- **Custom Driver Installation**

This Setup Guide only briefly explains **Automated Driver Installation**. For detailed instructions, refer to the **Installation** section.

NOTE:
- For Windows NT 4.0, Windows 2000, Windows XP and Windows Server 2003, make sure to log on as an administrator.

1 Insert the printer CD-ROM into the CD-ROM drive. The CD-ROM launches automatically.

> **NOTE:**
> - If the CD-ROM does not launch automatically, perform the following steps (1) - (2).
>   (1) Double-click the **My computer** icon. (Windows XP / Windows Server 2003: **Start** - **My Computer**)
>   (2) Double-click the CD-ROM icon.

2 Click **Install Printer Driver**.

3 Click **Automated Driver Installation**. The **License Agreement** window is displayed.

4 Click **[Yes]**. The **Printer port selection** window is displayed.

5 **[A] When using the Network interface cable:**
Click on **Select the Network port for KX-CL400** check button, and select the printer of the IP Address confirmed on the **Configuration Page** (refer to "Printing the Configuration Page" on page 17).

[B] When using the Parallel interface cable:
Click on **Select an existing printer port** check button, and click on the LPT port (Example: LPT1).

[C] When using the USB interface cable:
Click on **Install via the USB port (plug and play installation)** check button.

6 Click **[Next>]**. The **Installed Options** window is displayed.

7 Click on the check box of the installed options in your printer and select the total memory from the Memory list, and click **[Next >]**. The setup program starts installing the printer driver.

8 **[A] When using the Network interface cable:**
(1) Click **[Finish]**.

[B] When using the Parallel interface cable:
(1) Click **[Finish]** and turn the printer on.

If the **Welcome to the Found New Hardware Wizard** window is displayed, refer to the **Installation** section.

[C] When using the USB interface cable:

NOTE:
- For Windows 98, only Windows 98 SE is available when using a USB interface.

(1) When the **Connect the printer to the computer** window is displayed, connect the USB interface cable and turn the printer on.
Perform the following steps depending on the operating system:

For Windows 98 / Windows Me:
(2) When the **InstallShield Wizard Complete** window is displayed, click **[Finish]**.
For Windows 2000:
(2) If the **Digital Signature Not Found** window is displayed, click **[Yes]**. The **InstallShield Wizard Complete** window is displayed.
(3) Click **[Finish]**.
For Windows XP / Windows Server 2003:
(2) If the **Welcome to the Found New Hardware Wizard** window is displayed, refer to the **Installation** section.
(3) Click **[Finish]**.

NOTE:
- Restarting of the computer may be required depending on your computer environment. In this case, restart your computer.

■ For Windows (with Upgrade Kit)

When installing the printer driver for the printer equipped with the Upgrade Kit, use the printer CD-ROM provided with the Upgrade Kit.

The **Automated Driver Installation** is the same with the above steps. For detailed instructions, refer to the **Installation** section.

Settings and Printing

■ For Macintosh (with Upgrade Kit)

To print from a Macintosh, the **optional Upgrade Kit must be installed in the printer**.

For detailed instructions, refer to the **Installation** section.

For Mac OS 8.6 - 9.2

Step 1: Installing the PPD file and utilities
Install the **KX-CL410 PPD** (PostScript Printer Description) file, and then install the Adobe PostScript printer driver.

1 Insert the printer CD-ROM in your CD-ROM drive.

2 Open the **English** folder (**KX-CL410:Mac OS: English**).

3 Double-click the **KX-CL410 Installer** icon.
The **END-USER LICENSE AGREEMENT** window is displayed.

4 Follow the instruction on the screen to complete the installation.

Step 2: Installing the Adobe PostScript printer driver

1 Insert the printer CD-ROM in your CD-ROM drive.

2 Open the **English** folder (**KX-CL410:Mac OS: English**).

3 Double-click the **AdobePS 8.8 Installer** icon.
The **Adobe PostScript Driver** window is displayed.

4 Follow the instruction on the screen to complete the installation.

For Mac OS X 10.1 - 10.3

Installing the PPD file and printer driver

1 Insert the printer CD-ROM in your CD-ROM drive.

2 Open the **English** folder
(**KX-CL410:Mac OS X:English**).

3 Double-click the **KX-CL410 Installer** icon.

4 Follow the instructions to complete the installation.

NOTE:
• If you want to print Classic application documents, you are required to install the KX-CL410 software for Mac OS 9.2, then set the computer and printer. Refer to "For Mac OS 8.6 - 9.2" in this section.

Using the Printer Driver

■ For Windows

For example, to print a document created in Microsoft WordPad, perform the following steps.

1 Click **[Start]**, select **Programs** (**All Programs** for Windows XP / Windows Server 2003) and select **Accessories**, then click **WordPad**.
The **WordPad** window is displayed.

2 Click the **File** menu, then click **Print...**.
The **Print** window is displayed.

3 Select **Panasonic KX-CL400 PCL6**.

4 For Windows 98 / Windows Me / Windows NT 4.0:
Click **Properties**.
For Windows 2000:
Proceed to the step 5.
For Windows XP / Windows Server 2003:
Click **Preferences**.

5 Click a tab to set each setting.
• When setting the printer from an application, the setting is returned to the default setting if the application is closed.

6 (Click **[OK]** and) Click **[Print]** or **[OK]** in the **Print** window of the application to print the document.

NOTE:
• The **Print** window appearance depends on the application for Windows. Refer to the application manual.

■ For Macintosh (with Upgrade Kit)

To set the computer and printer, refer to the **Settings and Printing** section.

Removing Driver and Utilities

For the instructions to remove the printer driver and utilities, refer to "Removing Driver and Utilities" for Windows or Macintosh in the **Installation** section.

Maintenance

Clearing a Jam

If a media jam occurs, the printer panel displays "Jam <#>". (#: indicates the jam portion)

To clear the media jam, refer to "Clearing a Jam" in the **Maintenance and Specifications** section.

NOTE:
- When a media jam occurs while you are using the multi-purpose tray, be sure to push the multi-purpose tray and close the tray cover before you pull the media tray out of the printer or open the front door.

Replacing Supplies

When the life of a component is worn out, the printer cannot print.
For detailed information, refer to the installation guide included in the supply's carton to install it.

When the printer panel displays that a supply needs to be replaced, make sure that you have replacement supplies on hand.
- Toner Cartridge
- Waste Toner Cartridge
- Print Cartridge
- Fuser Unit
- Accumulator Unit
- Transfer Roller

Please contact the reseller from which the printer was purchased.
For detailed information, refer to "User Replaceable Components" in the **Maintenance and Specifications** section.

Adjusting Color Density

The printer panel provides an interface to adjust the density of the toner applied to the media.
This feature compensates for changes that can occur as environmental conditions change, replacement of accumulator unit and/or print cartridge.
To adjust the color density, refer to "Adjusting the Color Density (Color Calibration)" of **Basics** in the **Settings and Printing** section.

Setting "Adjust to Media"

This function is available in Windows only (not available in Macintosh).
If the print quality deteriorates when you print on other than recommended media, change the Adjust to Media settings. You can examine the print quality by printing out the test pattern.
To change the setting of Adjust to Media, refer to "Setting the "Adjust to Media" (Windows Only)" of **Basics** in the **Settings and Printing** section.

Cleaning the Printer

Periodic cleaning of the printer is recommended. The frequency of cleaning is dependent upon the environment in which the printer is used. You should clean the printer:
- At least once a month.
- When the printer experiences frequent media jams.
- When print quality has become deteriorated.

For detailed information, refer to "Cleaning the Printer" in the **Maintenance and Specifications** section.

Repacking

It is highly recommended that you keep the original carton and **ALL** packing materials.
Should you need to transport or ship your printer, please follow the instructions "Repacking" in the **Maintenance and Specifications** section.

Troubleshooting / Others

Troubleshooting

Before contacting an authorized service representative, perform the following step.

Error message is displayed on the LCD panel.	▶	Refer to "LCD Panel Message".
Trouble occurs during printing.	▶	Refer to "Printer Troubleshooting".
Trouble occurs when printing to the network printer.		Refer to "Trouble with Network Printing".
Prints have dull, faded colors.	▶	Refer to "Trouble with Print Quality".

Technical Support Calls

If you have read this manual, then tried the troubleshooting procedures and you are still having difficulty, please contact the reseller from which the printer was purchased.

LCD Panel Message

Trouble	Corrective Action
Load Letter	• Load Letter size media.
JAM1 See front door label	• Clear the media jam.
TC-K Replace	• Replace the Black toner cartridge.
WTC Replace	• Replace the waste toner cartridge.
PC-Black Replace	• Replace the Black print cartridge.
PC-Color Replace	• Replace the color print cartridge.
Printer Error (digit) Call for Service.	• Turn the printer off and back on again. If the problem persists, contact an authorized service representative.

For other LCD panel messages, refer to "LCD Panel Message" in the **Maintenance and Specifications** section.

Printer Troubleshooting

Trouble	Corrective Action
The printer is not operating.	• Plug the power cord into an AC outlet firmly and turn the printer on.
	• Connect the appropriate interface cable(s) properly.
The printer does not print correctly.	Appropriate driver may not be installed or this printer may not be selected. • Install the proper printer driver or select the appropriate printer when printing a document. Refer to the **Installation** section.
The setting for printing is not effective.	Some applications may not allow you to change the settings through the printer driver's setting window. • Change the application's settings.
Media is not fed from the multi-purpose tray.	• Select **Multi-Purpose Tray** for **Paper Source** in the printer driver.
Frequent paper picking errors or media jams occur.	• Make sure that the media is installed under the hooks at the front of the media tray.
	• Do not overfill the media tray (upper limit label).
	• Be sure to gently insert the media tray into the slot of the printer when installing it.
	• Clean the delay pad and pickup rollers of the media tray.
Error indicator is blinking.	A recoverable error has occurred such as an open door or a media jam. • Correct the condition displayed on the printer panel (close the door or clear the media jam, etc.).
Error indicator is on.	A system error has occurred. • Turn the printer off and back on again. If the problem persists, contact an authorized service representative.

Trouble with Network Printing

Refer to "Trouble with Network Printing" in the **Maintenance and Specifications** section.

Troubleshooting / Others

Trouble with Print Quality

To check the print quality, execute a test print as follows.

1 Press **Menu/Exit (Pause)** button on the printer panel.

2 Press ▲ button until the **System Information** menu appears.

3 Press ▶ button.

4 Press ▲ button until the **Test Print** menu appears.

5 Press **Enter** button to print each color page.

Trouble	Corrective Action
On the Test Print, a single color is not uniform or many vertical streaks (both light and dark) of slightly different density and non-uniform color are present.	The toner is almost depleted. • Replace the toner cartridge.
	The print cartridge is damaged. • Replace the print cartridge.
On the Test Print, halftone area has areas of weak color.	Paper does not match the environmental conditions, or it has too much moisture. • Try fresh paper, or another type of paper. • Store media in the original, dust-free package in the same environmental conditions as the printer.
A single color appears faded.	The color density is set incorrectly in the printer panel. Refer to "Adjusting the Color Density (Color Calibration)" in the **Settings and Printing** section.
	The toner is almost depleted. • Replace the toner cartridge.
	The print cartridge is damaged. • Replace the print cartridge.

For detailed information, refer to "Trouble with Print Quality" in the **Maintenance and Specifications** section.

■ Media

This printer is designed to work well with most types of paper. However, differences in paper may have significant effects on the quality of the print or the reliability of paper handling. For detailed information, refer to "Media" in the **Maintenance and Specifications** section.

Options and Supplies

Please contact the reseller from which the printer was purchased when purchasing options or supplies.

Options

Model Number	Description
KX-CLAD1	Automatic Duplex Unit for KX-CL400
KX-CLPF1	Optional Paper Feeder
KX-CLUG2	Upgrade Kit (for PostScript 3) for KX-CL400
KX-CLUG3	Upgrade Kit (for PostScript 3) for KX-CL600
KX-CLEM3	128 MB DIMM (Memory)
KX-CLEM4	256 MB DIMM (Memory)
KX-CLHD2	2.5″ Hard Disk Drive

Supplies

It is recommended that genuine Panasonic supplies are used.

Model Number	Description	Average Life (pages)[1]
KX-CLTC3	Cyan Toner Cartridge 6K	6,000
KX-CLTC4	Cyan Toner Cartridge 3K	3,000
KX-CLTM3	Magenta Toner Cartridge 6K	6,000
KX-CLTM4	Magenta Toner Cartridge 3K	3,000
KX-CLTY3	Yellow Toner Cartridge 6K	6,000
KX-CLTY4	Yellow Toner Cartridge 3K	3,000
KX-CLTK3	Black Toner Cartridge 6K	6,000
KX-CLPC3	Color Print Cartridge	15,000
KX-CLPK3	Black Print Cartridge	15,000
KX-CLFU3	Fuser Unit	100,000
KX-CLWT3	Waste Toner Cartridge	14,000
KX-CLAU3	Accumulator Unit	100,000
KX-CLTR3	Transfer Roller	100,000

[1] The rated life expectancy of each consumable is based on printing under specific operating conditions such as page coverage for a particular paper size (5% coverage per color at standard quality on A4 size paper). The actual consumables life will vary depending on its use and other printing variables including page coverage, paper size, media type, print quality, continuous or intermittent printing, number of color planes, ambient temperature and humidity.

The serial number is located on the label on the rear of the printer. For your convenience, record the number below and keep this book along with your proof of purchase, in the event of a theft or for future reference.

MODEL NO. _____

NAME OF
RESELLER _____

SERIAL NO. _____

DATE OF
PURCHASE _____